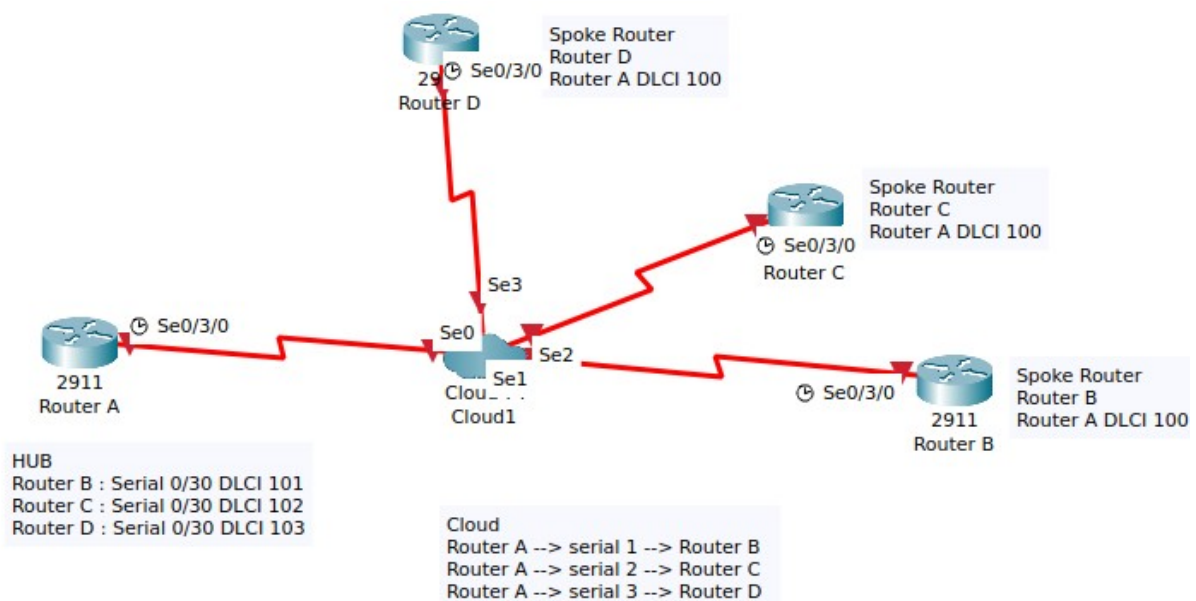


5th Assignment:

Applied Networking Lab WS 23/24



Question : (3 + 3 + 5 =11 Points): WAN Connectivity by Frame Relay

Objective:

To configure a network with end-to-end connectivity using a combination of private and public IP addresses, serial port connectivity, wireless connectivity, ISP connectivity, and cloud connectivity.

Deployment Steps:

1. **Router 2901/2911:**

- Add module HWIC for serial connectivity on routers

2. **Cloud Configuration**

- Configure the LMI type and DLCIs for virtual circuits on the "Frame Relay" tab of the "Cloud-PT" device.
- Set DLCIs on the "Serial" tabs for each router.

3. **Enable Frame Relay:**

- Enable RIP on the router to update the router with information about the neighbors in the network.
- This will allow the router to dynamically route traffic between the devices in the network.

Expected Outcomes:

1. Students should configure Frame Relay encapsulation on the router interfaces involved in the Frame Relay network.
2. Verify the encapsulation settings using the **show interface** command.
3. DLCIs should be **configured and mapped** to the correct interfaces.
4. Verify the configuration using the **show frame-relay pvc** command to ensure the PVCs are operational.

Assessment:

The assignment will be assessed based on the following criteria:

1. **Correctness: (3 points)** The solution should be configured correctly according to the specifications.
2. **Completeness: (3 Points)** The solution should include all of the required components and configurations.
3. **Testing: (5 points)** The solution should be tested thoroughly to ensure that it meets all of the requirements.

Due Date: MONDAY, JANUARY 26th, 2024, 10:00 am

Upload all relevant files (answers to theoretical questions as either PDF or .txt plus, .pkt, GNS-3 config files, etc.) to ISIS:

<https://isis.tu-berlin.de/course/view.php?id=35211>

Put the names and Student ID numbers (Matrikelnummer) of **all** your group members on your solution!